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SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406			RODRIGUEZ, WILLIAM H	
			ART UNIT	PAPER NUMBER
			3746	
DATE MAILED: 02/28/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

FINAL REJECTION

This office action is in response to the amendment and remarks filed 12/22/05.

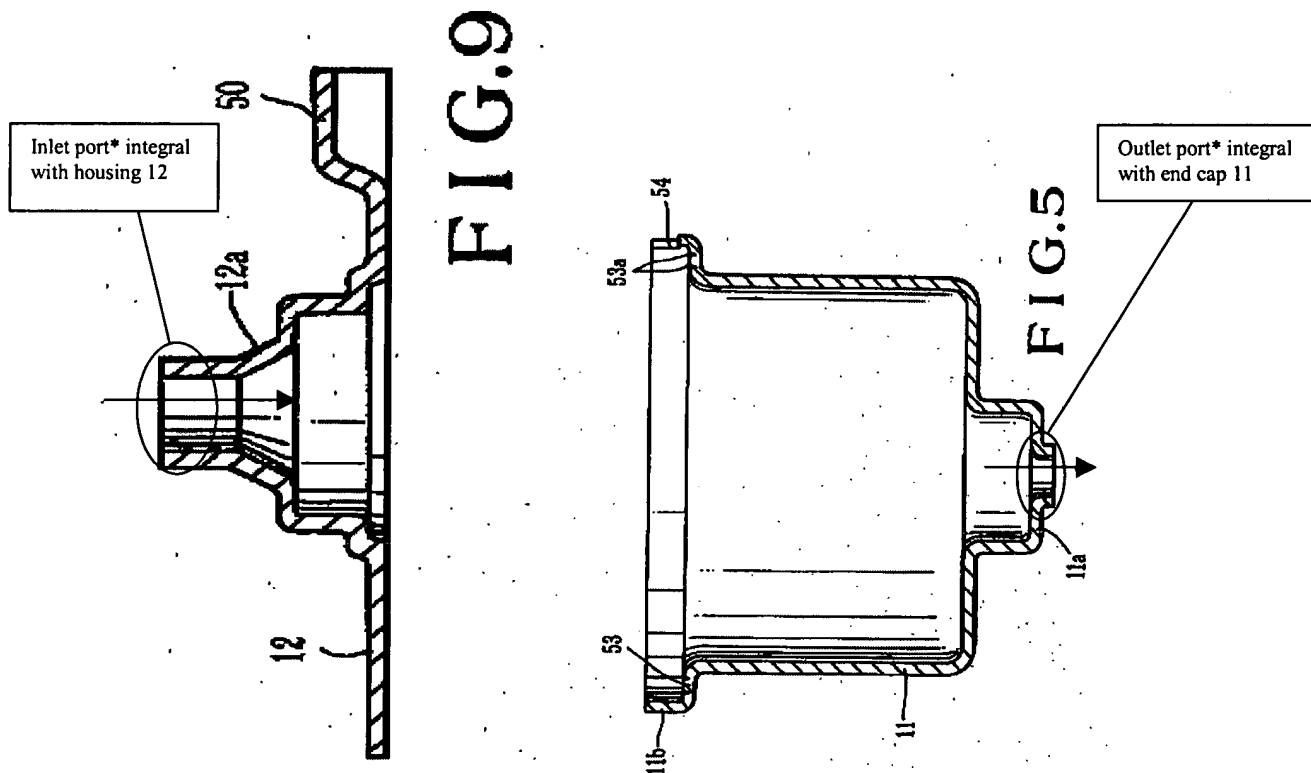
Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

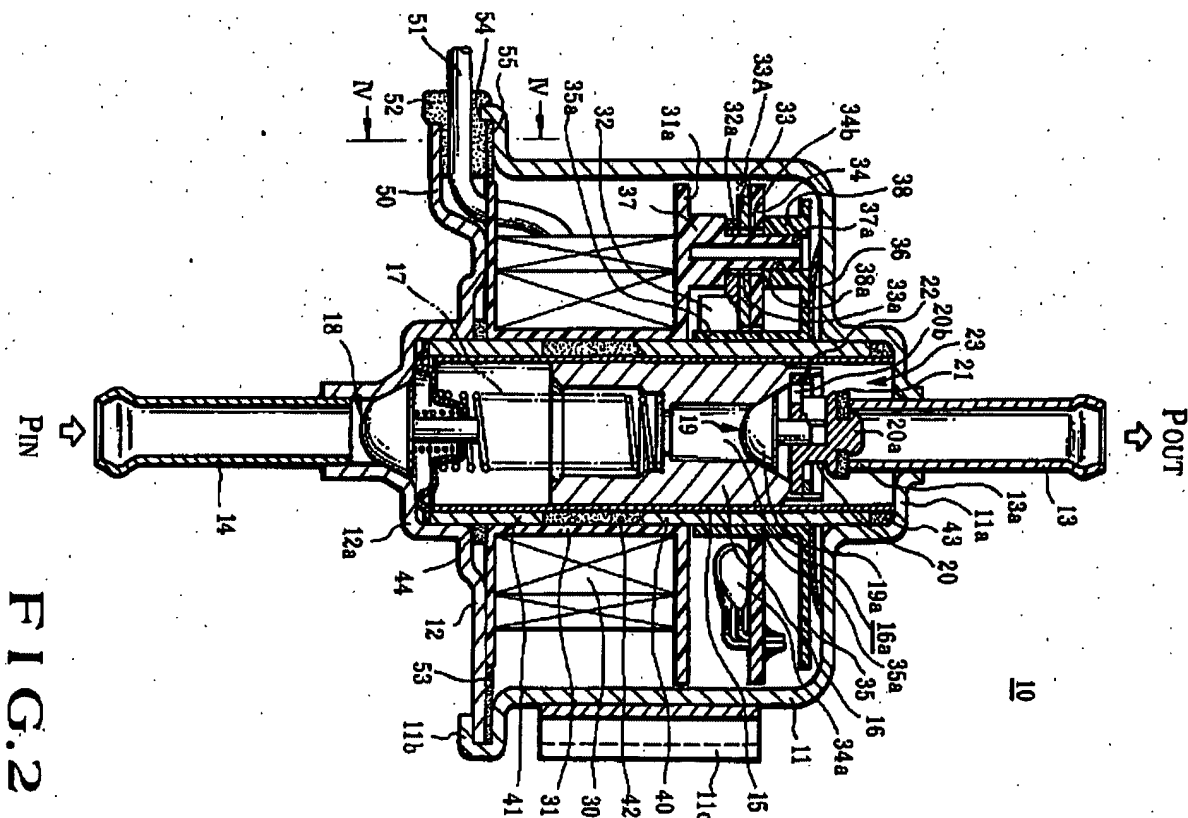
2. Claims 1-5, 8, 11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Masaka et al. (US 4,643,653).



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The lid 11 and end cap 12 make up the housing. The inlet port* is integral with the lid 12 and the outlet port* is integral with the end cap. Nipples 13 and 14 are inserted into the inlet and outlet ports respectively.

*According to the Merriam Webster's Collegiate Dictionary, the definition of "port" is an **opening for intake or exhaust**. Therefore, based on this dictionary definition, a broadest reasonable interpretation of the limitation "port" is interpreted to mean the opening for intake and exhaust shown by Masaka'653.



With respect to claim 1, **Masaka** teaches an electromagnetic fuel pump, comprising: a pump; electronic switching circuitry (column 6 lines 51-57) for controlling an electromagnetic coil 30 operatively arranged to operate said pump; and, a housing arranged to house said pump and said coil, said housing (12) comprising an integral (see column 3 lines 29-33) inlet port and an end cap 11 with an integral outlet port. See particularly **Figures 2, 5 and 9** above.

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With respect to claim 2, **Masaka** teaches that the electromagnetic fuel pump further comprising a drive circuit (column 4 lines 22-24) housed within said housing, said drive circuit operatively arranged to drive said coil.

With respect to claim 3, **Masaka** teaches that the drive circuit further comprises a diode operatively arranged as a surge suppressor (column 4 line 29; column 6 lines 56-57).

With respect to claim 4, **Masaka** teaches that the housing further comprises at least one mounting flange 11c. See particularly **Figure 3**.

With respect to claim 5, where a product by process claim (in the instance case, a housing made by a molding process) is rejected over a prior art product (Masaka's housing) that appears to be identical as is the case here, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

With respect to claim 8, **Masaka** teaches that the inlet port further comprises a bore; wherein said bore is operatively arranged for adhesion to an inlet fuel hose coupling nipple 14. See particularly **Figure 2** above.

With respect to claim 11, **Masaka** teaches that the outlet port further comprises a bore; wherein said bore is operatively arranged for adhesion to an outlet fuel hose coupling nipple 13. See particularly **Figure 2** above.

With respect to claim 16, **Masaka** teaches that the electronic switching circuitry is mounted on a printed circuit board 34 within said housing, and said electromagnetic coil 30 is mounted on a bobbin assembly 31 fixedly secured to said printed circuit board. See particularly Figures 1, 2, 15; column 4 lines 28-31.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Masaka et al. (US 4,643,653)**.

With regards to the word “integral” used in the claims rejected below, “the court has held that the use of a one piece construction instead of the structure disclosed in [prior art] would be merely a matter of obvious engineering choice”, which is not sufficient by itself to patentably distinguish the invention over an otherwise old device satisfying the structural limitations but comprised of several parts. See MPEP 2144.04 V.

With respect to claim 6, **Masaka** teaches that the inlet port further comprises a nipple 14, operatively arranged for coupling with an inlet fuel hose. **Masaka** does not teach that the inlet port is integral with the nipple 14. However, as stated by the court, the use of a one piece construction instead of the structure disclosed in **Masaka** would have been merely a matter of obvious engineering choice within the level of one of ordinary skilled in the art at the time the invention was made. Therefore, one of ordinary skill in the art would have found it obvious to make **Masaka**’s inlet port integral with the nipple 14 in order to reduce manufacturing cost and time by making a one-piece construction rather than several pieces.

With respect to claim 9, **Masaka** teaches that the outlet port further comprises a nipple 13, operatively arranged for coupling with an outlet fuel hose. **Masaka** does not teach that the

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outlet port is integral with the nipple 13. However, as stated by the court, the use of a one piece construction instead of the structure disclosed in Masaka would have been merely a matter of obvious engineering choice within the level of one of ordinary skilled in the art at the time the invention was made. Therefore, one of ordinary skill in the art would have found it obvious to make Masaka's outlet port integral with the nipple 13 in order to reduce manufacturing cost and time by making a one-piece construction rather than several pieces.

5. Claims 7, 10 and 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Masaka et al. (US 4,643,653)** in view of **Masaka (US 4,306,842)**.

With respect to claims 7 and 10, **Masaka'653** teaches that the inlet port comprises an insert 14 and that the outlet port comprises an insert 13. **Masaka'653** does not teach that the inserts 13, 14 are threaded into the ports. However, **Masaka'842** teaches an electromagnetic pump similar to Masaka's 653, wherein an insert inlet port 23 comprises threads in order to easily remove/replace said insert in case of failure or maintenance. Therefore, as taught by **Masaka'842**, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added threads to **Masaka'653** inserts 13, 14 in order to easily remove/replace said inserts in case of failure or maintenance. See particularly Figure 2 of **Maska'842**.

Masaka'653 inserts 13 and 14 are brazed/welded to their corresponding ports. If either or both of the inserts 13 and 14 were broken, it would have been very costly and time consuming

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to remove the inserts to replace them. As taught by Masaka'842, a better solution to avoid these costly repairs is to make the inserts threadable so that if they fail, it is easier to replace them.

With respect to claim 19, **Masaka'653** teaches an electromagnetic fuel pump, comprising: a pump; electronic switching circuitry (column 6 lines 51-57) for controlling an electromagnetic coil 30 operatively arranged to operate said pump; and, a two piece housing (11, 12) operatively arranged to house said pump and said coil, said two piece housing comprising a first material, wherein a first piece 11 of said two piece housing comprises an insert inlet port 14 and a second piece 12 of said two piece housing comprises an insert outlet port 13. **Masaka'653** does not teach that the insert inlet port and the insert outlet port comprise threads for threadably receiving nipples having threads. However, **Masaka'842** teaches an electromagnetic pump similar to Masaka's 653, wherein an insert inlet port 23 comprises threads in order to easily remove/replace said insert from said inlet port in case of failure or maintenance (see Figure 2 of Masaka'842). Therefore, as taught by **Masaka'842**, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added threads to **Masaka'653** inserts 13, 14 in order to easily remove/replace said inserts in case of failure or maintenance. See particularly Figure 2 of Maska'842.

Masaka'653 inserts 13 and 14 are brazed/welded to their corresponding ports. If either or both of the inserts 13 and 14 were broken, it would have been very costly and time consuming to remove the inserts to replace them. As taught by **Masaka'842**, a better solution to avoid these costly repairs is to make the inserts threadable so that if they fail, it is easier to replace them.

Therefore, as taught by **Masaka'842**, the inlet and outlet ports of **Masaka'653** can be *adapted* for threadably inserting and removing threaded nipples 13 and 14. Therefore, as taught

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by **Masaka'842**, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added threads to the inlet and outlet ports of **Masaka'653** for threadably inserting and removing threaded nipples 13 and 14 in order to easily remove/replace said inserts in case of failure or maintenance.

Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made Masaka's 653 inserts of a different material (i.e., plastic) than the housing in order to make the pump lighter (in case of a portable pump) and/or to reduce the cost of manufacturing the inserts and maintenance costs.

Allowable Subject Matter

6. Claims 12-15, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

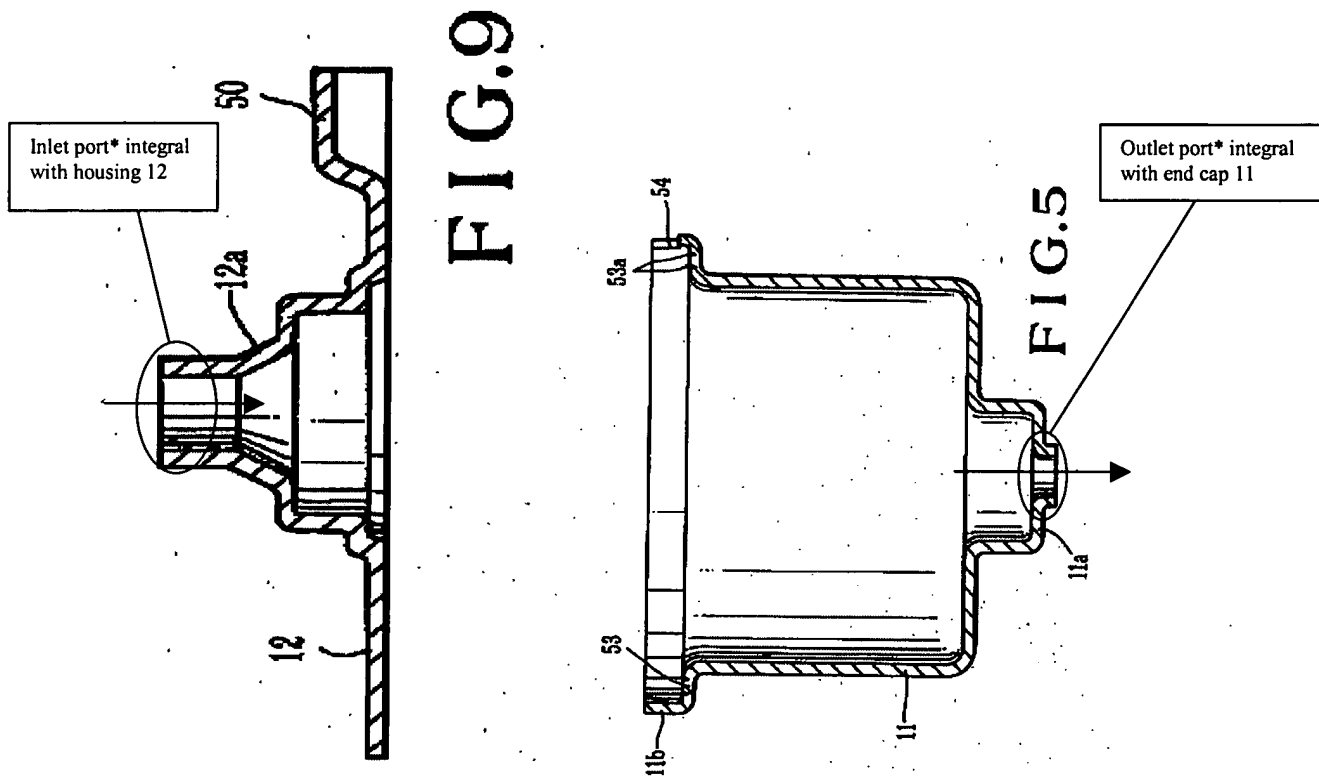
7. Applicant's arguments filed 12/22/05 have been fully considered but they are not persuasive for the following reasons.

With respect to claim 1, on page 9 applicant argues that Masaka'653 identifies pipes 13 and 14 as the ports, not portions 11a and 12a.

As clearly stated in the rejection above, the broadest reasonable interpretation of "a port" according to the dictionary definition is **an opening for intake or exhaust**. Therefore, given the claimed recitations "an inlet port; and an outlet port" their broadest reasonable interpretation,

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Masaka teaches said housing (12) comprising an integral inlet port and an end cap 11 with an integral outlet port. See Figure 5 and 9 below.



With respect to claim 19, on page 11 applicant argues that Masaka teaches that pipes 45 and 46 are attached to fixtures 23 and 24 with pressure, brazing, swage, or other non-threaded arrangements (col. 5 lines 37-40). However, neither Masaka'653 nor Masaka'842 teach this on col. 5 lines 37-40.

Masaka'653 in col. 5 lines 37-40 teaches:

Rotation of the stacked assembly including the coil bobbin 31 housed in the pump housing is prevented by utilizing a frictional force between the adjacent members or by providing an anti-rotational engaging member between the coil bobbin 31 and the lid 12. With this arrangement, the heat sink 33 can be brought into contact with the inner wall of the body 11 so as to allow

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Masaka'842 in col. 5 lines 37-40 teaches:

through the connections between the sleeve and the fittings 23 and 24. The inlet and outlet fixtures 23 and 24 are provided with pipes 45 and 46 for connecting the inlet passage 23b and the outlet passage 24b of respective fixtures 23 and 24 to the usual associated elements. 40
The electromagnetic pump of this invention can be

Moreover, Masaka'842 teaches an electromagnetic pump similar to Masaka's 653, wherein an insert inlet port 23 comprises threads in order to easily remove/replace said insert from said inlet port in case of failure or maintenance (see Figure 2 of Masaka'842). Therefore, as taught by Masaka'842, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added threads to Masaka'653 inserts 13, 14 in order to easily remove/replace said inserts in case of failure or maintenance. See particularly Figure 2 of Masaka'842.

Masaka'653 inserts 13 and 14 are brazed/welded to their corresponding ports. If either or both of the inserts 13 and 14 were broken, it would have been very costly and time consuming to remove the inserts to replace them. As taught by Masaka'842, a better solution to avoid these costly repairs is to make the inserts threadable so that if they fail, it is easier to replace them.

Therefore, as taught by Masaka'842, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added threads to the inlet and outlet ports of Masaka'653 for threadably inserting and removing threaded nipples 13 and 14 in order to easily remove/replace said inserts in case of failure or maintenance.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

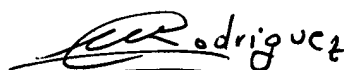
Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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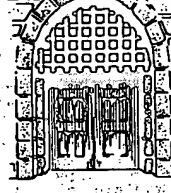
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William H. Rodriguez
Primary Examiner
Art Unit 3746

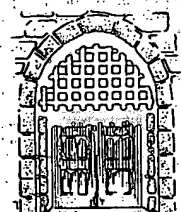
2/23/06

port n [ME *portier*, fr. MF, gate, door, fr. L *porta* passage, gate; akin to *L portus port*] (bef. 12c) 1 chiefly Scot.: GATE 2 a : an opening (as in a valve, seat or valve face) for intake or exhaust of a fluid b : the area of opening in a cylinder face of a passageway for the working fluid in an engine; also : such a passageway 3 a : an opening in a vessel's side (as for admitting light or loading cargo) b archaic : the cover for a porthole 4 : a hole in an armored vehicle or fortification through which guns may be fired 5 : a hardware interface by which a computer communicates with another device or system
port n (ME, fr. MF, fr. *porter* to carry, fr. *L portare*) (14c) 1 : the manner of bearing oneself 2 archaic : STATE 3 : the position in which a military weapon is carried at the command *port arms*
port vt [*'port*] (1580) : to turn or put (a helm) to the left — used chiefly as a command
port n [prob. fr. *'port* or **port*] (ca. 1625) : the left side of a ship or aircraft looking forward — called also *larboard*; compare *starboard* — *port adj*
port n (*Oporto*, Portugal) (1691) : a sweet fortified wine of rich taste and aroma made in Portugal; also : a similar wine made elsewhere
portabilis -*'por-tə-'bil-ē-* *adj* [ME, fr. MF, fr. LL *portabilis*, fr. *L portare* to carry, more at FARE] (15c) 1 a : capable of being carried or moved about (a ~ TV) (a ~ sawmill) b : usable on many computers without modification (~ software) 2 archaic : BEARABLE — *portability* \-*pər-tə-'bi-l-i-tē*, -*pōr-* n — *portably* \-*pər-tə-'blē*, -*pōr-* *adv*
portable n (1833) : something that is portable.
portage -*'pɔr-tij*, -*pör-, 3 also pör-'tāzh* n [ME, fr. MF, fr. *porter* to carry] (15c) 1 : the labor of carrying or transporting 2 archaic : the cost of carrying : PORTERAGE 3 a : the carrying of boats or goods overland from one body of water to another or around an obstacle (as a rapids) b : the route followed in making such a transfer
portage \-*p'ɔr-tij*, -*pör-*, *pör-'tāzh* v *b* *portaged*; *port-tag-ing* v (1864) : to carry over a portage — *v i* : to move gear over a portage
portal -*'pɔr-təl*, -*pör-n* n [ME, fr. MF, fr. ML *portale* city gate, porch, fr. neut. of *portalis* of a gate, fr. *L porta* gate — more at *PORT*] (14c) 1 : DOOR, ENTRANCE esp : a grand or imposing one 2 : the whole architectural composition surrounding and including the doorways and porches of a church 3 : the approach or entrance to a bridge or tunnel 4 : a communicating part or area of an organism; specif : the point at which something (as a pathogen) enters the body
portal adj [NL *porta* transverse fissure of the liver, fr. *L*, gate] (1845) 1 : of or relating to the transverse fissure on the underside of the liver where most of the vessels enter 2 : of, relating to, or being a portal vein
portal system n [*portal vein*] (1851) : a system of veins that begins and ends in capillaries
portal-to-portal adj (1943) : of or relating to the time spent by a worker in traveling between the entrance to an employer's property and the worker's actual job site (as in a mine) (~ pay)
portal vein n [*'porta*] (1845) : a vein that collects blood from one part of the body and distributes it in another through capillaries; esp : a vein carrying blood from the digestive organs and spleen to the liver
port-a-men-to \-*p'ɔr-tə-'men-t(ə)*, -*pör-* n [*pl* -menti, \-(ə)t(ə) [It., lit., act of carrying, fr. *portare* to carry, fr. *L portare* -mentū, \-(ə)t(ə) [It., lit., movement from one tone to another (as by the voice)] (1771) : a continuous gliding movement from one tone to another (as by the voice)
port-a-pack \-*p'ɔr-tə-'pæk*, -*pör-* n [*portable* + -*'back*] (1970) : a small portable combined videotape recorder and camera
port arms n [fr. the command *port arms!*] (ca. 1890) : a position in the manual of arms in which the rifle is held diagonally in front of the body with the muzzle pointing upward to the left; also : a command to assume this position
port-at-ive \-*p'ɔr-tə-tiv*, -*pör-* *adj* [ME *portatif*, fr. MF, fr. *L portatus*, pp. of *portare*] (14c) : PORTABLE
port-cullis \-*p'ɔrt-'kʊ-ləs*, -*pör-* n [ME *port colice*, fr. MF *porte colice*, lit., sliding door] (14c) : a grating of iron hung over the gateway of a fortified place and lowered between grooves to prevent passage
port de bras \-*p'ɔr-də-'brās* n [F, lit., carriage of the arm] (1912) : the technique and practice of arm movement in ballet
Port du Salut \-*p'ɔrt-du-'salut*, -*pör-* *n* [*pl* -lüt, -sä-, -sal-'yü, -sel-\] [*F* *port du salut*, *port-salut*, fr. *Port du Salut*, Trappist abbey in northwest France] (1881) : a semisoft pressed ripened cheese of usu. mild flavor originated by Trappist monks in France
Porte \-*p'ɔrt*, -*pört* n [F, short for *Sublime Porte*, lit., sublime gate; fr. the gate of the sultan's palace; where justice was administered] (15c) : the government of the Ottoman empire
porte-cochère \-*p'ɔrt-kò-'sher*, -*pört-* n [F *porte cochère*, lit., coach door] (1698) 1 : a passageway through a building or screen wall designed to let vehicles pass from the street to an interior courtyard 2 : a roofed structure extending from the entrance of a building over an adjacent driveway and sheltering those getting in or out of vehicles
por-tend \-*p'ɔr-tend*, -*pör-* v [ME, fr. *L portendere*, fr. *por*-forward (akin to *port* through) + *tendere* to stretch — more at FOR, THIN] (15c) 1 : to give an omen or anticipatory sign of : BODE 2 : INDICATE, SIGNIFY
por-tent \-*p'ɔr-tent*, -*pör-* n [L *portentum*, fr. neut. of *portentus*, pp. of *portendere*] (ca. 1587) 1 : something that foreshadows a coming event : OMEN 2 : prophetic indication or indication 3 : MARVEL; PRODIGY
por-ten-tous \-*p'ɔr-tən-təs*, -*pör-* *adj* (15c) 1 : of, relating to, or constituting a portent 2 : eliciting amazement or wonder : PRODIGIOUS 3 a : being a grave or serious matter (~ decisions) b : self-consciously



portcullis

\ə about \ˈ kitten, F. iabŭ \ˈ further, \ə ash \ə ace \ə mop, mar
\au out, Ach chin \æ bet \e veasy \g vo \ih hit \i ice \j job
\g sing \o go \ə law \oi boy \th thin \th the \u foot \u foot
\v vet \zh vision \ä k, ˆ, æ, œ, u, ū, ˆ see Guide to Pronunciation



portcullis